

Amendments To The Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-67. (cancelled)

Claim 68. (currently amended) An implantable ocular drug delivery device comprising:
a non linear shaped body member comprising a tube provided in a coil or zig-zag shape and that is implanted within a patient eye to deliver a drug substance to the patient eye via the body member; and
a cap element sized to provide a cross-section larger than the cross-section of the coil or zig-zag shape, wherein the body member is positioned within the vitreous fluid and the cap element abuts an incision through which the device is inserted to stabilize the device once implanted, wherein the device is insertable through an incision approximately the same size as the outer diameter of the tube forming the body member.

Claim 69. (previously presented) The device of claim 68 wherein the device body member comprises at least three deviations from a linear path.

Claim 70. (previously presented) The device of claim 68 wherein the device body member comprises at least four deviations from a linear path.

Claim 71. (previously presented) The device of claim 68 wherein the device body member comprises at least five deviations from a linear path.

Claim 72. (previously presented) The device of claim 68 wherein the device body member comprises a helical shape.

Claim 73. (previously presented) The device of claim 68 wherein the device body member comprises a substantially Z-shape.

Claim 74. (previously presented) The device of claim 68 wherein the cap element is in contact with a patient eye outer surface while the body member is inserted into the eye.

Claim 75. (previously presented) The device of claim 68 wherein the cap element mates the body member at a proximal end of the device.

Claim 76. (previously presented) The device of claim 68 wherein the device comprises a therapeutic agent for delivery to the patient during use of the device.

Claim 77. (previously presented) The device of claim 68 wherein the device body member comprises a polymer.

Claim 78. (previously presented) The device of claim 68 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient eye.

Claim 79. (currently amended) An implantable ocular drug delivery device comprising:

a coil-shaped body member comprising a tube wound into a coil shape that is implanted within a patient eye to deliver a drug substance to the patient eye via the body member; and
a cap element sized to provide a cross-section larger than the cross-section of the coil-shaped body member, wherein the body member is positioned within the vitreous fluid and the cap element abuts an incision through which the device is inserted to stabilize the device once implanted, wherein the device is insertable through an incision approximately the same size as the outer diameter of the tube forming the body member.

Claim 80. (previously presented) The device of claim 79 wherein the device comprises a therapeutic agent for delivery to the patient during use of the device.

Claim 81. (previously presented) The device of claim 79 wherein the device body member comprises a polymer.

Claim 82. (previously presented) The device of claim 79 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient.

Claim 83. (currently amended) A method for treating a patient comprising:

(a) providing a delivery device comprising a non-linear shaped body member comprising a tube provided in a coil or zig-zag shape, the body member having a proximal end and a distal end, and a cap element at the proximal end, the cap element sized to provide a cross-section larger than the cross-section of the coil or zig-zag shape;

(b) inserting the device into a patient's eye through an incision, the incision being approximately the same size as the outer diameter of the tube forming the body member, whereby the body member resides in the vitreous fluid of the patient's eye and the cap element remains outside the incision through which the device is inserted and abuts the outer surface of the eye to stabilize the device; and

(c) allowing a therapeutic substance to be administered to the patient via the body member.

Claim 84. (previously presented) The method of claim 83 wherein the device body member comprises at least three deviations from a linear path.

Claim 85. (previously presented) The method of claim 83 wherein the device body member comprises at least four deviations from a linear path.

Claim 86. (previously presented) The method of claim 83 wherein the device body member comprises at least five deviations from a linear path.

Claim 87. (previously presented) The method of claim 83 wherein the device body member comprises a helical shape.

Claim 88. (previously presented) The method of claim 83 wherein the device body member comprises a substantially Z-shape.

Claim 89. (previously presented) The method of claim 83 wherein the substance administered to the patient is chosen from one or more of an antibiotic, an antifungal, an antiviral, an antibacterial, an antiallergenic, an anti-inflammatory, a decongestant, a miotic or anti-cholinesterase, a mydriatic, a sympathomimetic, an antineoplastic, a hormonal agent, a beta adrenergic blocker, a growth factor, a carbonic anhydrase inhibitor, an angiogenesis inhibitor, a prostaglandin or an antiprostaglandin.

Claim 90. (previously presented) The method of claim 83 wherein the device body member comprises a polymer.

Claim 91. (previously presented) The method of claim 83 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient.

Claim 92. (previously presented) The method of claim 83 wherein the device comprises a shape memory material.

Claim 93. (currently amended) A method for treating a patient comprising: (a) providing a drug delivery device comprising a coil-shaped body member and a cap element sized to provide a cross-section larger than the cross-section of the coil-shaped body member; (b) inserting into a patient eye the device whereby the coil-shaped body member is placed in the

vitreous fluid of the patient eye and the cap element remains outside the eye and abuts the incision, wherein the device is inserted through an incision smaller than the cross-section of the coil-shaped body member; and (c) allowing a substance to be delivered by the device to the patient.

Claim 94. (previously presented) The method of claim 93 wherein the substance delivered to the patient eye is chosen from one or more of an antibiotic, an antifungal, an antiviral, an antibacterial, an antiallergenic, an anti-inflammatory, a decongestant, a miotic or anti-cholinesterase, a mydriatic, a sympathomimetic, an antineoplastic, a hormonal agent, a beta adrenergic blocker, a growth factor, a carbonic anhydrase inhibitor, an angiogenesis inhibitor, a prostaglandin or an antiprostaglandin.

Claim 95. (previously presented) The method of claim 93 wherein the device body member comprises a polymer.

Claim 96. (previously presented) The method of claim 93 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient eye.

Claim 97. (previously presented) The method of claim 93 wherein the device comprises a cap element that is in contact with the patient eye outer surface while the body member is inserted into the eye.

Claim 98. (previously presented) The method of claim 93 wherein the device comprises a shape memory material.

Claim 99. (currently amended) A method for treating a patient comprising: (a) providing a drug delivery device comprising a non-linear shaped body member having a coil or zig-zag shape, and a cap element sized to provide a cross-section larger than the coil or zig-zag shape; (b) inserting into a patient eye the device whereby the body member resides in the

vitreous fluid of the patient eye and the cap element remains outside the eye and abuts the incision, wherein the incision is smaller than the cross-section of the coil or zig-zag shaped body member; and (c) administering a substance to the patient via the body member.

Claim 100. (previously presented) The method of claim 99 wherein the device body member comprises at least three deviations from a linear path.

Claim 101. (previously presented) The method of claim 99 wherein the device body member comprises at least four deviations from a linear path.

Claim 102. (previously presented) The method of claim 99 wherein the device body member comprises at least five deviations from a linear path.

Claim 103. (previously presented) The method of claim 99 wherein the device body member comprises a helical shape.

Claim 104. (previously presented) The method of claim 99 wherein the device body member comprises a substantially Z-shape.

Claim 105. (previously presented) The method of claim 104 wherein the substance administered to the patient eye is chosen from one or more of an antibiotic, an antifungal, an antiviral, an antibacterial, antiallergenic, an anti-inflammatory, a decongestant, a miotic or anti-cholinesterase, a mydriatic, a sympathomimetic, an antineoplastic, a hormonal agent, a beta adrenergic blocker, a growth factor, a carbonic anhydrase inhibitor, an angiogenesis inhibitor, a prostaglandin or an antiprostaglandin.

Claim 106. (previously presented) The method of claim 99 wherein the device body member comprises a polymer.

Claim 107. (previously presented) The method of claim 99 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient eye.

Claim 108. (previously presented) The method of claim 99 wherein the device is inserted until the cap element is in contact with the outer surface of the patient eye.

Claim 109. (previously presented) The method of claim 83, 93, or 99 wherein the device is inserted by twisting or screwing the device into the eye.

Claim 110. (previously presented) The method of claim 99 wherein the device comprises a shape memory material.

Claim 111. (currently amended) An implantable ocular drug delivery device comprising: a) a coil-shaped body member that is implanted within the vitreous fluid of a patient eye during use of the device to deliver a drug substance to the patient eye, the body member comprising a tube wound into a coil shape; b) a cap element sized to provide a cross-section larger than the cross-section of the coil-shaped body member, wherein the cap element mates against the patient eye outer surface while the body member is inserted within the eye; wherein the device is insertable within the eye through an incision approximately the same size as the outer diameter of the tube forming the body member.

Claim 112. (previously presented) The device of claim 111 wherein the device comprises a therapeutic agent for delivery to the patient eye during use of the device.

Claim 113. (previously presented) The device of claim 111 wherein the cap element mates the body member at a proximal end of the device.

Claim 114. (previously presented) The device of claim 111 wherein the device body member comprises a polymer.

Claim 115. (previously presented) The device of claim 111 wherein the device body member comprises a polymer that comprises a therapeutic substance to be delivered to the patient eye.

Claim 116. (currently amended) An implantable ocular drug delivery device comprising:

a non-linear shaped body member that has a coil or zig-zag shape and that is implanted within a patient eye during use of the device to deliver a drug substance to the patient eye via the body member; and

a cap element sized to provide a cross-section larger than the cross-section of the coil or zig-zag shape, the cap element configured to mate against the patient eye outer surface while the body member is inserted to the eye;

wherein the device is implantable within the vitreous fluid of a patient eye through an incision smaller than the cross-section of the coil or zig-zag shaped body member.

Claim 117. (previously presented) The method of claim 83, 93, or 99, wherein the incision comprises a sclerotomy.

Claim 118. (previously presented) The method of claim 83, 93, or 99, wherein the device is implanted in a minimally invasive surgical procedure.

Claim 119. (previously presented) The method of claim 83, 93, or 99, wherein the device is implanted at the pars plana.

Claim 120. (canceled)

Claim 121. (canceled)

Claim 122. (previously presented) The device of claim 68, 79, 111, or 116, wherein at least a portion of the body member comprises a biodegradable polymer.

Claim 123. (previously presented) The device of claim 122, wherein the biodegradable polymer contains microparticles of the drug substance, wherein as the polymer degrades, the drug substance is released.

Claim 124. (previously presented) The device of claim 122, wherein the biodegradable polymer is selected from polyesters of molecular weight of 4,000 to 100,000, homopolymers and copolymers of polylactic acid and polyglycolic acid, polycaprolactone, homopolymers and copolymers of polyanhydrides, homopolymers and copolymers of dicarboxylic acids, polymeric fatty acid dimer compounds, poly(alky-2-cyanoacrylate), poly(hexyl-2-cyanoacrylate), collagen (gelatin), polyacetals, divinyloxyalkylenes, polydihydropyrans, polyphosphazenes, homopolymers and copolymers of amino acids, polydioxinones, polyalkylcyano acetates, polysaccharides and their derivatives, and cellulose and hydroxymethyl cellulose.

Claim 125. (previously presented) The device of claim 122, wherein the biodegradable polymer comprises one or more of terephthalic acid anhydride, bis(p-anhydride), poly(p-carboxyphenoxy) alkyl, sebacic acid, adipic acid, oxalic acid, phthalic acid, maleic acid, polydodecanedioic acid polyorthoesters, copolymers of leucine and methyl glutamate, dextran, or cyclodextran.

Claim 126. (previously presented) The device of claim 68, 79, 111, or 116, , wherein at least a portion of the device comprises a material that is permeable or semi-permeable to the drug substance.

Claim 127. (previously presented) The device of claim 126, wherein the portion of the device that comprises a permeable or semi-permeable material represents a percentage of the

overall body member material, and wherein the percentage of body member material composed of permeable or semi-permeable material controls rate of delivery of the drug substance.

Claim 128. (canceled)

Claim 129. (currently amended) An implantable ocular drug delivery device comprising:

a coil-shaped body member comprising a tube provided in a coil shape that is implanted within the vitreous fluid of a patient eye to deliver a drug substance to the patient via the body member; and

a cap element sized to provide a cross-section larger than the cross-section of the coil-shaped body member, the cap element being in contact with the coil-shaped body member;

wherein the device is insertable through an incision approximately the same size as the outer diameter of the tube forming the body member.

Claim 130. (canceled)

Claim 131. (canceled)

Claim 132. (previously presented) The device of claim 129, wherein at least a portion of the body member comprises a biodegradable polymer.

Claim 133. (previously presented) The device of claim 132, wherein the biodegradable polymer contains microparticles of the drug substance, wherein as the polymer degrades, the drug substance is released.

Claim 134. (previously presented) The device of claim 132, wherein the biodegradable polymer is selected from polyesters of molecular weight of 4,000 to 100,000, homopolymers and copolymers of polylactic acid and polyglycolic acid, polycaprolactone, homopolymers and copolymers of polyanhydrides, homopolymers and copolymers of

dicarboxylic acids, polymeric fatty acid dimer compounds, poly(alky-2-cyanoacrylate), poly(hexyl-2-cyanoacrylate), collagen (gelatin), polyacetals, divinyloxyalkylenes, polydihydropyrans, polyphosphazenes, homopolymers and copolymers of amino acids, polydioxinones, polyalkylcyano acetates, polysaccharides and their derivatives, and cellulose and hydroxymethyl cellulose.

Claim 135. (previously presented) The device of claim 132, wherein the biodegradable polymer comprises one or more of terephthalic acid anhydride, bis(p-anhydride), poly(p-carboxyphenoxy) alkyl, sebacic acid, adipic acid, oxalic acid, phthalic acid, maleic acid, polydodecanedioic acid polyorthoesters, copolymers of leucine and methyl glutamate, dextran, or cyclodextran.

Claim 136. (previously presented) The device of claim 68, 79, 111, 116, or 129, wherein at least a portion of the device comprises a material that is permeable or semi-permeable to the drug substance.

Claim 137. (previously presented) The device of claim 136, wherein the portion of the device that comprises a permeable or semi-permeable material represents a percentage of the overall body member material, and wherein the percentage of body member material composed of permeable or semi-permeable material controls rate of delivery of the drug substance.

Claim 138. (currently amended) The device of claim 68, 79, 111, or 129 wherein the tube has a circular cross-section.